## WHAT IS CLAIMED IS:

- 1. Isolated human DCR5 protein.
- 2. The isolated human DCR5 protein of claim 1, having the amino acid sequence as set forth in SEQ ID NO: 12.
- 3. Protein domains having DCR5-specific activity, such domains comprising at least 6 and preferably at least 8 consecutive residues of human DCR5 protein of claim 1.
- 4. An antibody which specifically binds the isolated human DCR5 protein of claim 1.
- 5. The antibody of claim 4, which is a monoclonal antibody.
- 6. A composition comprising the human DCR5 protein of claim 1, in a pharmaceutically acceptable carrier.
- 7. A composition comprising the antibody of claim 4, in a pharmaceutically acceptable carrier.
- 8. A human DCR5 protein produced by the method of:
- a) constructing a vector comprising a nucleic acid molecule containing a nucleotide sequence encoding human DCR5 protein as set forth in SEQ ID NO: 12, wherein the nucleic acid molecule is operatively linked to an expression control sequence capable of directing its expression in a host cell;
  - b) introducing the vector of (a) into a host cell;
- c) growing the host cell of (b) under conditions which permit the production of human DCR5 protein; and
  - d) recovering the human DCR5 protein so produced.
- 9. The protein of claim 7, wherein the host cell is a bacterial, yeast, insect or mammalian cell.
- 10. The human DCR5 protein of claim 1, fused to an immunoglobulin constant region.
- 11. The human DCR5 protein of claim 10, wherein the immunoglobulin constant region is the Fc portion of human IgG1.

- 12. A method of regulating cartilage and bone growth in a subject in need thereof comprising administering to the subject a therapeutically effective amount of the human DCR5 protein of claim 1 such that cartilage and bone growth are regulated.
- 13. A method of regulating cartilage and bone growth in a subject in need thereof comprising administering to the subject a therapeutically effective amount of the antibody of claim 4 such that cartilage and bone growth are regulated.